

# I-77 OVER ROUTE 606 BRIDGE REPLACEMENT VDOT PROJECT: 0077-010-834, C501, B644 CONTRACT ID: C00117110DB115 DECEMBER 9, 2022 REVISED DECEMBER 20, 2022

### **Contractual**

1. Is the QAM position Part or Full time?

*VDOT Response: The QAM is not required to be on-site full time.* 

2. Are the Pre-Proposal and Utility Meeting Presentations available?

*VDOT Response: The Pre-Proposal and Utility Meeting Presentations are currently available on BidExpress.com and on VDOT's public website at <u>https://www.virginiadot.org/business/request-for-proposals.asp.</u>* 

3. In the pre-proposal meeting it was stated that strict adherence to the RFP documents was paramount and the point emphasized as "...this is not the time to innovate." Does this mean the Department would deem any variation from the conceptual drawings as non-responsive, for example using a different beam material than what is implied or a different type of abutment? Please clarify with specificity the Department's intent in this statement and explain (preferably with examples) what could trigger a non-responsive determination.

VDOT Response: Per RFP Part 1, an Offeror's Proposal must meet all requirements established by this RFP. Requirements of this RFP generally will use the words "shall", "will", or "must" (or equivalent terms) to identify a required item that must be submitted with an Offeror's Proposal. Failure to meet an RFP requirement may render an Offeror's Proposal non-responsive. An example of a deviation that could trigger a non-responsive determination is modification of the lane and shoulder widths shown in typical sections and design criteria table (Attachment 2.2). Using a different abutment type or beam material (prestressed concrete or structural steel) is permissible as long as it does not deviate from the RFP requirements.

#### **Structure**

4. Would the Department be receptive to an alternate span arrangement in lieu of the conceptual span arrangement shown?

*VDOT Response: The Department is receptive to alternative span arrangements in lieu of the conceptual span arrangement shown.* 



5. Part 2, Section 2.7.2, 2<sup>nd</sup> paragraph states the drainage requirements for spread on the existing and proposed bridges. The Manual of the Structure and Bridge Division, Part 2, File No. 33.01-5 states that for Deck Drainage, the design storm intensity shall be increased by 20%. Does the 20% increase apply to drainage design for the existing and proposed bridges during construction?

VDOT Response: The temporary Deck Drainage design during construction shall consider, at minimum, the design storm rainfall intensity in accordance with the VDOT Drainage Manual. A 20% increase of the design storm intensity should be evaluated, and if able to be accommodated during construction with no significant constructability issue(s), is recommended to be applied to the temporary Deck Drainage design. Upon completion of construction, the post development Deck Drainage design shall be able to accommodate a 20% increase in the design storm rainfall intensity as required by the "Manual Of The Structure & Bridge Division" (Chapter 33 – Considerations of Climate Change and Coastal Storms).

6. Have the RFP Concept Bridge plans Sequence of Construction drawings been checked for the allowable temporary spread as required in the RFP?

*VDOT Response: The Sequence of Contruction drawings provided in the RFP are conceptual in nature. The Design-Builder is responsible for developing their own sequence of construction that meets all the requirements of the RFP including, but not limited to, the allowable temporary spread.* 

7. The Manual of the Structure and Bridge Division, Part 2, File No.17.01-9 allows MSE straps on certain abutment backwall types to provide lateral stability IF the District Structure and Bridge Engineer (DBE) approves their use. Will the DBE allow use of straps on the backwall of the abutment type shown in the RFP Concept Bridge plans to provide lateral stability, provided the requirements in Part 2, Attachment 2.3.3 Guidelines on Using MSE Straps are followed?

VDOT Response: VDOT will consider the use of MSE Wall straps, however, the use of MSE Wall straps cannot be used without prior written approval from the District Structure and Bridge Engineer. Assuming all requirements in Part 2, Attachment 2.3.3 Guidelines are followed, no exceptions are taken to the straps for the semi-integral abutments. However, design details justifying the use of MSE wall straps will be required for approval purposes.

8. Part 2, Section 2.3.1, 5th paragraph states that "For phased construction, there shall be at least 12" from the back side of the temporary barrier to the edge of the new portion of the deck to accommodate placement of the deck screed." However, the RFP Concept Bridge plans do not show this 12". Please clarify the requirement.

*VDOT Response: VDOT S&B Manual Vol. V Part 2 File No. 32.12-4 requires at least 12"* from the back side of the temporary barrier to the edge of the new portion of the deck to



accommodate placement of the deck screed. The proposed bridge width and location of the Phase 1 construction includes this 12" gap.

9. The RFP plans show the bridge abutments for the replacement bridge as semi-integral abutments. However, a full integral abutment would be appropriate for this bridge per the Abutment Selection Criteria in Chapter 17, Volume 2 of the Structure and Bridge Design Manual. Please confirm whether it is the Department's intention to utilize semi-integral abutments as shown in the RFP plans or if we are to follow the selection criteria in the S&B Design Manual.

VDOT Response: It is the Department's intention to follow the selection criteria in the S&B Design Manual. The semi-integral abutment was selected for the RFP due to the requirements of the VDOT S&B Manual Vol. V Part 2 File No. 17.01-12 that the total integral abutment height (finished grade to bottom of footing) shall not exceed 17 feet. Due to the widening of the bridge, the edge of the abutment gets close to the 17-foot requirement. If all noted criteria can be met, the Department takes no exception to a fully integral abutment.

10. The RFP plans show the bridge abutments as MSE walls. FEMA shows that the northern abutment is in a Zone A floodplain with no base flood elevation. Please clarify if MSE walls can be used within the floodplain.

VDOT Response: The S&B Manual Chapter 18, File 18.02-3, requires design approval for MSE walls to be placed in the floodplain. Where design approvals are sought, special considerations will be required as described in File 18.02-3. While preliminary approval has been provided for the conceptual plan, the final design approval request will need to provide additional information, describing the location of the wall in relation to flooding events, the potential risks of placing the wall in the floodplain, the measures taken to reduce or mitigate these risks and the final details before being fully approved.

11. The northern abutment is within a Zone A floodplain although it is not over a waterway. Please clarify if an H&H analysis and CLOMR/LOMR process through FEMA are required.

<u>VDOT Response</u>: A Hydrologic & Hydraulic (H&H) analysis to support a CLOMR/LOMR with FEMA coordination is not required for the proposed I-77 NB bridge work. Existing culvert extensions that maintain the structure's slope and geometry will not require a H&H analysis be performed. However, the introducing or relocating of culverts on the project will require a H&H analysis be performed for VDOT and utilizing Form LD-293. VDOT will also require an H&H analysis at the proposed MSE Wall to determine the 100-year flood elevation, evaluate impacts to the MSE Wall and foundation designs, and in the selection of appropriate scour countermeasures as required. VDOT will also require a provision/note in the construction plans for the removal of any temporary access for construction of the MSE Wall and restoration of the ground to original contour.



12. Has the application of Scenario 5 from IIM-LD-195.12 in determining disturbed area for stormwater requirements been applied for through DEQ?

VDOT Response: No requests have been applied for through DEQ. The multiple Scenarios outlined in IIM-LD-195.12 are typically used in the documentation of Routine Maintenance Activities and providing justification for why ESC and/or SWM requirements do not apply. The work proposed to be performed under UPC 117110 is a Regulated Land Disturbing Activity that will include an area greater than one acre of land disturbance. As such, the ESC and SWM requirements are applicable to the project and with the expectation that a Virginia Pollutant Discharge Elimination System (VPDES) Construction General Permit (CGP) will be required to be obtained from DEQ.

## Roadway, Survey, Drainage

13. The RFP Concept Bridge and Road Plans do not depict any slope protection, ditch treatment or specific treatment under the proposed bridge. Please clarify the requirement for how the final slopes and ditches under the replacement bridge are to be treated.

VDOT Response: As indicated on the Bridges Profile (Sheet 1 of 5), the preliminary design shows that the existing slopes and ditches between the proposed MSE retaining walls shall generally match the existing conditions. The Design-Builder is responsible for confirming this approach with their final design.

14. The survey DGNs and design DGNs provided do not line up when referenced together. In addition, the existing topo file provided does not appear to match the survey within the PDF of the RFP Conceptual plans, refer to the edge of pavements along Route 606. Please provide coordinated survey and design files that represent the RFP conceptual plans such that the Design Build Teams can adequately represent their design and compared to the RFP conception plans for the required layered PDF files.

*VDOT Response: VDOT has verified that the provided survey and design .dgn files are coordinated and represent the RFP Conceptual Plans. No additional coordinated survey files are necessary to provide the layered PDF files.* 

15. The RFP stipulates a maximum unreinforced slope gradient of 2:1 with the only modification to the existing triple box under mainline being a wingwall replacement and both these points were emphasized in the pre-proposal meeting. The existing slope above this box is already 2:1, so the shoulder widening of mainline will result in a gradient steeper than 2:1. The information available, when taken individually seems specific, yet together leaves the offeror thinking there are two possible interpretations. One where this conflict has not been realized and the other where the Department wants to steer them towards using a reinforced slope option instead of modifying the box. If it's the latter please state this explicitly, and in either case note if there are any options for slope stabilization in this area <u>not</u> allowed.



VDOT Response: Per RFP Part 2, Section 2.6.3.2, "the maximum slope ratio to be used for cut and/or unreinforced roadway embankment fill slopes shall not be steeper than 2H:1V." Cut and fill slopes steeper than 2:1 can be utilized **if reinforced** and properly supported by engineering analysis based on site-specific field observations and laboratory strength testing and approved by VDOT. All reinforced soil slopes shall meet the Materials Division Manual of Instruction, Chapter 3 and VDOT's Reinforced Soil Slope Standard.

16. Please provide a .dgn file of the Project NEPA LOD and Study Area.

*VDOT Response: The Limits of Disturbance and Study Area are approximations based on the RFP Conceptual Plans, project termini, and existing RW limits. There is no .dgn file available.* 

## Traffic Engineering, TMP, ITS, Signage

17. For single lane operations on Route 606 with temporary signals/flagging per Section 2.10.3 of the RFP, please clarify if a 3rd temporary signal unit will be required to control the NB I-77 off-ramp, given the proximity of the ramp to the bridge.

*VDOT Response: The DB is responsible for traffic maintenance in accordance with VDOT policies and procedures.* 

18. To clarify the existing sign structure at approximate station 1233+40 would not need to be replaced. The RFP (Section 2.9.1.1) reads that DB should replace all existing ground mount and OH mounted signs in area of "actual" construction. This area is a mill and overlay area per the RFP. We felt the RFP was different from our notes taken in the prebid meeting where we were informed no impacts were anticipated to Sign Structures leading into and out of the project.

*VDOT* Response: Section 2.9.1.1 has been revised as follows: The existing ground mounted signs do not require replacement unless located within Cut/Fill limits. Any signing beyond the Cut/Fill limits that require relocation, replacement, or modification due to the proposed design shall be the responsibility of the Design-Builder.

## **Environmental**, Wetlands

19. The T&E Clearance indicates a Time of Year Restriction (TOYR) for bats will be observed from April 15 to September 15 and the Preliminary EQ-103 indicated the April 1st to November 14 TOYR under the following Special Provision: 'TREE REMOVAL TIME OF YEAR RESTRICTION FOR ROOSTING BAT HABITAT'. The March 23, 2022, USFWS proposed rule would reclassify the NLEB as endangered, which would nullify the 4(d) Rule. We anticipate that the USFWS will finalize the proposed rule, this month and become effective 30 days later (December 2022). Has VDOT conducted formal consultation with the USFWS regarding NLEB?



VDOT Response: There has been no formal consultation between VDOT and USFWS regarding NLEB for this project. The Design-Builder will be responsible for all required consultation. The Environmental Due Diligence Package and Environmental Special Provisions reference the appropriate TOYR of April 1 - November 14. Effect determinations for the NLEB mimicked those for the Indiana bat and were not based on the 4(d) rule.

- 20. Has VDOT conducted a wetland/Waters of the U.S. delineation on the project area?
  - a. If so, please provide the JD and associated .dgn.
  - b. If there is no existing JD, will a wetland delineation be performed by VDOT?

VDOT Response: VDOT has not performed a jurisdictional delineation for WOUS. The Design-Builder shall be responsible for verifying permit requirements in support of their final design prior to construction. Per RFP Part 2, Section 2.4.4, should the Design-Builder determine that water quality permits are required for the Project, the Design-Builder shall conduct the preliminary field assessment needed to obtain them including, but not limited to, wetland delineation, stream assessment, and permit impact sketches.

#### **Landscape**

21. Section 2.8 Landscaping states that "the Design-Builder shall provide a landscape plan at locations for laydown areas, storage yards, and borrow pits within the VDOT right-of-way that will not become stormwater management BMPs in order to convert these areas to forest." Please provide an exhibit or electronic design file(s) detailing the proposed landscape areas for the DB team to assess impacts and access restrictions.

*VDOT Response: Landscaping activities are only required to restore areas to original, pre-construction conditions; therefore, landscaping areas are to be determined by Design-Builder and shall include restoration of laydown areas, storage areas, borrow pits, etc. as required for construction activities. No landscaping plans are required. RFP Part 2, Section 2.8 has been revised in Addendum No. 2 to clarify the intent.* 

22. Section 2.8 Landscaping states to "provide a mixture of native hardwood trees planted per the requirements for reforestation in Section 2.8." The RFP does not include a reforestation section, please provide the specifications required for the mixture of native hardwood trees.

*VDOT Response: Reforestation is not required; see response to Question No. 20. Disturbed areas are to be returned to original, pre-construction condition.* 



# Additional Questions

23. Section 2.8 VDOT Structure & Bridge Manual File No. 17.01-7 states: "Unless a design approval is granted by the District Structure and Bridge Engineer (DBE): MSE wall location for overpass structures shall accommodate a minimum of one future lane in each direction for the roadway below the overpass." Do the leveling pad elevations for the proposed MSE walls, in front of the abutments, need to be set low enough to accommodate future widening of Rte. 606 and associated regrading of the slopes in front of the walls? If so, please provide direction on the specific geometric requirements.

<u>VDOT Response: The MSE walls shall be designed to accommodate future widening as</u> <u>described in VDOT Structure & Bridge Manual File No. 17.01-7. This includes providing</u> <u>sufficient width and setting the leveling pads at an appropriate elevation to accommodate</u> <u>the future widening. Future design shall accommodate a 3-lane GS-3.</u>